

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 3, as follows:

Field

The Embodiments of the invention ~~relates~~ relate to bone adhesives and bone cements, in particular the use of novel adhesive bone cements in surgery.

Please amend the paragraph beginning on page 1, line 6, as follows:

Background

There is a clinical need to fill defects in bone, for example following removal of diseased bone or trauma. These defects can be repaired using ceramic bone grafts, or alternatively using bone cements that can be ~~moulded~~ molded before setting.

Please amend the paragraph beginning on page 2, line 26, as follows:

Summary

~~It is an objective~~ Embodiments of the present invention ~~to~~ provide biocompatible, ceramic-based bone cement with appropriate strength characteristics that is adhesive that sets over a clinically relevant timescale (typically 1 to 30 minutes at room temperature).

Please insert before the paragraph beginning on page 31, line 26:

Brief Description of the Figures

Figure 1 shows characteristics of three different adhesive bone cements.

Figure 2 shows the compressive strengths and setting times of a cement made using liquid polyphosphoric acid and β -TCP at different powder to liquid ratios.

Figure 3 shows the setting times of a cement made using different calcium phosphate components.

Figure 4 shows the compressive strengths and apparent densities of a polyphosphoric acid cement compacted to various pressures prior to setting.

Figure 5 shows the initial and final setting times of a polyphosphoric acid- β -TCP cement when mixed with different retardants.

Please amend the paragraph beginning on page 31, line 26, as follows:

Detailed Description

~~Accordingly, Embodiments of~~ to the present invention ~~there is provided~~ provide a bone cement composition comprising a calcium component and a liquid component in which the liquid component comprises a mixture of pyrophosphate ions and at least one of the following: orthophosphate ions and/or water. Thus the liquid component may comprise pyrophosphate with either orthophosphate ions or water, or with both orthophosphate ions and water.